TABLE 3.1-3 National Ambient Air Quality Standards, Kentucky State Ambient Air Quality Standards, Maximum Allowable Increments for Prevention of Significant Deterioration, and Highest Background Levels Representative of the Paducah Gaseous Diffusion Plant

Pollutant[a]	Averaging Time	NAAQS/SAAQS[b] Value	Type[c]	PSD Increment[d] (μg/m³) Class I	Class II	Highest Background Level Concentration[e]	Location (Year)
SO_2	3 hours	0.50 ppm (1,300 μg/m³)	S	25	512	0.065 ppm (13%)	Grahamville (1999)
	24 hours	0.14 ppm (365 μg/m³)	P	5	91	0.033 ppm (24%)	Grahamville (1997)
	Annual	0.03 ppm (80 μg/m³)	P	2	20	0.005 ppm (17%)	Grahamville (1999)
NO_2	Annual	0.053 ppm (100 μg/m³)	P, S	2.5	25	0.012 ppm (23%)	Paducah (1998)
CO[f]	1 hour	35 ppm (40 mg/m³)	P, S	–[g]	–	6.1 ppm (17%)	Paducah (1997)
	8 hours	9 ppm (10 mg/m³)	P, S	–	–	2.9 ppm (32%)	Paducah (1997)
O_3	1 hour	0.12 ppm (235 μg/m³)	P, S	–	–	0.110 ppm (92%)[h]	Paducah (1999)
	8 hours	0.08 ppm (157 μg/m³)	P, S	–	–	0.093 ppm (116%)[i]	Paducah (1999)
PM_{10}	24 hours	150 μg/m³	P, S	8	30	79 μg/m³ (53%)[h]	Paducah (2002)
	Annual	50 μg/m³	P, S	4	17	25 μg/m³ (50%)	Paducah (1999)
$PM_{2.5}$	24 hours	65 μg/m³	P, S	–	–	31.1 μg/m³ (48%)[h]	Paducah (2002)
	Annual	15 μg/m³	P, S	–	–	14.7 μg/m³ (98%)	Paducah (2000)
Pb	Calendar quarter	1.5 μg/m³	P, S	–	–	0.02 μg/m³ (3%)	Louisville (1997)

Footnotes on next page.

TABLE 3.1-3 (Cont.)

[a] CO = carbon monoxide; NO_2 = nitrogen dioxide; O_3 = ozone; Pb = lead; $PM_{2.5}$ = particulate matter ≤2.5 μm; PM_{10} = particulate matter ≤10 μm; and SO_2 = sulfur dioxide.

[b] The SO_2 (3-hour and 24-hour) and CO standards are attained when the stated value is not exceeded more than once per year. The SO_2 (annual), NO_2, and Pb standards are attained when the stated value is not exceeded. The O_3 (1-hour) standard is attained when the stated value is not exceeded more than three times in 3 years. The O_3 (8-hour) standard is attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average concentration does not exceed the stated value. The PM_{10} (annual) and $PM_{2.5}$ (annual) standards are attained when the 3-year average of the annual arithmetic means does not exceed the stated value. The PM_{10} (24-hour) standard is attained when the 3-year average of the 99th percentile values does not exceed the stated value. The $PM_{2.5}$ (24-hour) standard is attained when the 3-year average of the annual 98th percentile values does not exceed the stated value.

[c] P = primary standard whose limits were set to protect public health; S = secondary standard whose limits were set to protect public welfare.

[d] Class I areas are specifically designated areas in which degradation of air quality is severely restricted under the Clean Air Act; Class II areas have a somewhat less stringent set of allowable emissions.

[e] Values in parentheses are monitored concentrations as a percentage of NAAQS or SAAQS.

[f] The NAAQS have a primary standard only; the Kentucky SAAQS, however, have a secondary standard as well.

[g] A dash indicates that no standard exists.

[h] Second-highest value.

[i] Fourth-highest value.

Sources: 40 CFR Part 50; Kentucky Division for Air Quality (2002); 40 CFR 52.21; EPA (2003a).